



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/557,297	11/18/2005	Gianni Perdomi	MI 6108 (US)	7324

34872 7590 01/11/2010  
BASELL USA INC.  
NEWTOWN SQUARE CENTER  
3801 WEST CHESTER PIKE, BLDG. B  
NEWTOWN SQUARE, PA 19703

EXAMINER
----------

NELSON, MICHAEL B

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

01/11/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant has cancelled claim 10 and therefore the examiner's note referring to the "consisting essentially of" language is withdrawn. The remaining claims are rejected as in the previous office action.

### ***Response to Arguments***

2. Applicant's arguments filed on 12/17/09 have been considered but are not persuasive.

3. Regarding applicant's arguments against the Karim et al. reference on the grounds that it does not disclose the component Iii. The examiner disagrees. The Karim et al. reference discloses that the ethylene compound can be made with lower pressure processes by copolymerizing ethylene and C3 and higher alpha-olefins. One having ordinary skill in the art would recognize that the low density ethylenes produced by this process are linear low density ethylenes. Applicant also argues that the higher-alpha olefin is not specified in Karim et al., however Karim et al. discloses C3 and higher alpha olefins which reads on the instantly claimed alpha-olefins. Karim et al. does not disclose the exact amount of these higher-alpha olefin however in order to produce the ethylene compound with the disclosed density and melt flow rates, the amount of higher alpha-olefins would fall within the claimed range. In summation, Karim et al. discloses a process for the ethylene compound which would result in it being a linear ethylene polymer. Karim et al. also discloses the same higher alpha-olefins as in the instant application and, in order to produce the low densities required, the amount of alpha-olefins would be selected to lie within the instantly claimed range as would be obvious to one having

Art Unit: 1794

ordinary skill. The applicant point to the examples only being homopolymers of ethylene (i.e. no C3 or higher olefins) however the specification of Karim is not limited by its examples.

4. Regarding applicant's arguments against the density of the acrylate copolymer, the examiner maintains that because Karim et al. discloses copolymers with melt flow rates (2-40) which overlap those of the instant application (2), the densities will likewise overlap. Applicant seems to be arguing that there is in fact not a correlation between melt flow rate and density of an ethylene polymer. The examiner disagrees. The Karim reference specifies several polymer component grades. The reference describes the grades by limiting their melt flow rate but one having ordinary skill in the art would recognize that for a given polymer, a melt flow rate has a corresponding density and the two property are often used interchangeably to describe the grade of the polymer to be used (molecular weight is another such descriptive property). Hence one having ordinary skill would recognize that if the ethylene copolymer of Karim has the same melting flow rate as the instant ethylene copolymer it will likewise have the same density. Regarding the "wide" range, while Karim discloses 1-100 it also specifically discloses an preferred range with an endpoint of 2 for its melt flow rate which is the same melt flow rate as the instant copolymer and therefore provides a preferable specific number which reads on the instant invention.

5. Regarding applicant arguments related to the ionomer resin of Karim, the examiner does not find this component of Karim would prevent one having ordinary skill in the art from otherwise optimizing the relative amounts of ethylene copolymer to LDPE given that Karim specifically discloses that these two components would be adjusted ( "ratio of the two ethylene polymers", C4, L30-50).

Art Unit: 1794

6. Applicant alleges that it would be laborious to arrive at the instant invention from the prior art reference. The examiner disagrees. Applicant alleges that one would have to pick a different, linear, polyethylene, when in fact the low pressure processes disclosed by Karim would produce such a polyethylene. Applicant also argues that it would be difficult to choose a polyethylene having higher alpha olefins even though Karim specifically discloses this as a suitable material. Applicant alleges that Karim provides no basis for adjusting the amount of copolymer, but as explained above, Karim's required density and melt flow rate for the copolymer would result in the comonomer ratio being selected to meet these requirements and thereby read on the instant claims. Applicant also implies that the lack of an explicit "density" for the component I would make it unduly difficult to arrive at the instant invention and yet, as explained above, Karim's requirement of a particular melt flow rate would limit the component to the same densities. In summation, while Karim does not disclose the composition using the same properties and language as in the instant claims, his composition, with its limited properties, would read on the instant film when reduced to practice by one having ordinary skill.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571) 270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner, Art Unit 1794

/MN/  
01/04/10